

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** November 14
~~September 30~~, 2016

Thru: Bridget C. Bohac, Chief Clerk
Richard A. Hyde, P.E., Executive Director

From: L'Oreal W. Stepney, P.E., Deputy Director
Office of Water

Docket No.: 2015-1015-RUL

Subject: Commission Approval for Rulemaking Adoption
Chapter 39, Public Notice
Chapter 295, Water Rights, Procedural
Chapter 297, Water Rights, Substantive
Chapter 318, Marine Seawater Desalination Discharges
HB 2031 and HB 4097: Marine Seawater Desalination
Rule Project No. 2015-029-295-OW

Background and reason(s) for the rulemaking:

In 2015, the 84th Texas Legislature passed House Bill (HB) 2031 and HB 4097. HB 2031 relates to the diversion, treatment, and use of marine seawater and the discharge of treated marine seawater and waste resulting from the desalination of marine seawater. HB 4097 addresses seawater desalination for industrial purposes.

In HB 2031, the legislature created new Texas Water Code (TWC), Chapter 18, to address marine seawater desalination projects. HB 2031 also amended TWC, §5.509, Temporary or Emergency Order Relating to Discharge of Waste or Pollutants; TWC, §5.551, Permitting Procedures; Applicability; TWC, §7.302, Grounds for Revocation or Suspension of Permit; TWC, §11.0237, Water Rights for Instream Flows Dedicated to Environmental Needs or Bay and Estuary Inflows; TWC, §11.082, Unlawful Use: Civil Penalty; TWC, §11.0842, Administrative Penalty; TWC, §11.121, Permit Required; TWC, §16.053, Regional Water Plans; and, TWC, §26.0291, Water Quality Fee. In addition, HB 2031 amended Texas Health and Safety Code (THSC), Chapter 341, Subchapter C, by adding THSC, §341.0316, Desalination of Marine Seawater for Drinking Water, and repealed TWC, §16.060, Desalination Studies and Research.

TWC, §18.003(a), requires a person to obtain a permit to divert and use state water that consists of marine seawater if: 1) the point of diversion is located less than three miles seaward of any point located on the coast of this state; or 2) the seawater contains a total dissolved solids (TDS) concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 milligrams per liter (mg/L). TWC, §18.003(b), creates an exemption from permitting to divert and use marine seawater if TWC, §18.003(a), does not apply. In addition, TWC, §18.005(c), requires a person to obtain a permit to discharge: 1) treated marine seawater into a natural stream in this state or a lake, reservoir, or other impoundment in this state; or 2) waste resulting from the desalination of treated marine seawater into the Gulf of Mexico.

HB 2031 also directs the commission to issue a bed and banks permit to convey marine seawater in any flowing natural stream or lake, reservoir, or other impoundment. HB 2031 prohibits: 1) the discharge of treated marine seawater into a flowing natural stream

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and impoundment for conveyance purposes without a discharge permit issued under TWC, Chapter 18; and 2) the diversion of marine seawater and the discharge of waste resulting from the desalination of marine seawater in a bay and estuary under the expedited permit process as allowed by TWC, Chapter 18. A person has the option to submit an application under TWC, Chapter 11 or 26 to seek a permit to divert or discharge in a bay or estuary.

Further, HB 2031 directs the commission to adopt rules to expedite permitting and related processes for the diversion of marine seawater and the discharge of both treated marine seawater and waste resulting from the desalination process, in accordance with TWC, Chapter 18. In addition, HB 2031 requires the commission to establish reasonable measures to minimize impingement and entrainment associated with the diversion of marine seawater.

Finally, HB 2031 requires that the Texas Parks and Wildlife Department (TPWD) and the Texas General Land Office (GLO) conduct a study to identify zones in the Gulf of Mexico that are appropriate for the diversion of marine seawater and for the discharge of waste resulting from the desalination of marine seawater and for the commission to adopt rules designating diversion zones by September 1, 2020. Under TWC, §18.003(j) and §18.005(g), an applicant for a permit to divert marine seawater must consult with TPWD and GLO regarding the point(s) of diversion or discharge until such time as the commission adopts rules designating diversion or discharge zones.

HB 4097 relates to seawater desalination projects. HB 4097 creates TWC, §11.1405, Desalination of Seawater for Use for Industrial Purposes, and TWC, §26.0272, Permits Authorizing Discharges from Certain Seawater Desalination Facilities, amends TWC, §27.021, Permit for Disposal of Brine from Desalination Operations or Drinking Water Treatment Residuals in Class I Injection Wells, and TWC, §27.025, General Permit Authorizing Use of Class I Injection Well to Inject Nonhazardous Brine from Desalination Operations or Nonhazardous Drinking Water Treatment Residuals, to address seawater desalination for industrial purposes.

TWC, §11.1405(a), requires a person to obtain a permit to divert and use state water that consists of seawater if: 1) the point of diversion is located less than three miles seaward of any point located on the coast of this state; or 2) the seawater contains a TDS concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 mg/L. TWC, §11.1405(b) creates an exemption from permitting to divert and use seawater if TWC, §11.1405(a) does not apply. When a permit application is required, TWC, §11.1405(e) specifies that the application does not require a finding of water availability and TWC, §11.1405(f) requires the permit to be consistent with the commission's adopted environmental flow standards in 30 TAC Chapter 298, Environmental Flow Standards for Surface Water. TWC, §11.1405(h), directs the commission to adopt rules to expedite permitting and related processes for the diversion of seawater.

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Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

For Chapters 295 and 297, the scope of the rulemaking is to implement the directive in TWC, Chapter 18, and corresponding amendments to the TWC in order to address marine seawater desalination projects. In addition, the rulemaking is adopted to implement the directive in TWC, §11.1405 and §26.0272, and corresponding amendments to the TWC in order to address seawater desalination for industrial purposes.

The adopted rulemaking expedites permitting and related processes for: 1) the diversion of marine seawater and conveyance of treated marine seawater in the bed and banks of a watercourse in accordance with TWC, Chapter 18; and 2) the diversion of seawater for desalination and use for industrial purposes in accordance with TWC, §11.1405.

In newly created Chapter 318, the adopted rules provide an expedited permitting process for treated marine seawater discharges (e.g. the resulting freshwater from the desalination process) and off-shore discharges (wastewater discharges from the marine seawater desalination project into the Gulf of Mexico at a point located three or more miles off-shore). Near-shore discharges (wastewater discharges from the marine seawater desalination project into the Gulf of Mexico at a point located less than three miles off-shore) are subject to the Texas Pollutant Discharge Elimination System (TPDES) program and must be processed in accordance with existing permitting procedures, however the executive director will make every reasonable effort to expedite the review of these applications.

Under the adopted rules, the permitting process for treated marine seawater discharges contains streamlined applications, reduced review periods, use of email, reduced applicant response times, a single web-based notice, and a shorter public comment period. For treated marine seawater discharges, the executive director will review timely public comments and develop a response to comments. In accordance with TWC, §18.005(e)(1), the public may request a public meeting and/or a contested case hearing on treated marine seawater discharges.

Under the adopted rules, the permitting process for off-shore discharges also contains streamlined applications, reduced review periods, use of email, reduced applicant response times, a single web-based notice, and a shorter public comment period. For off-shore discharges, the executive director will review timely public comments and develop a final technical summary instead of a response to comments. In accordance with TWC, §18.005(e)(3), there is no opportunity for a public meeting or contested case hearing for off-shore discharges.

The adopted rules in Chapter 39 provide an expedited public notice process for treated marine seawater discharges and off-shore discharges from the marine seawater desalination project.

B.) Scope required by federal regulations or state statutes:

The adopted rulemaking establishes ~~an~~ expedited permitting and related processes for the diversion of marine seawater, treated marine seawater discharges, and off-shore discharges in accordance with TWC, Chapter 18. In addition, TWC, §11.1405(h), directs

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the commission to adopt rules to expedite permitting and related processes for the diversion of seawater to address seawater desalination for industrial purposes.

C.) Additional staff recommendations that are not required by federal rule or state statute:

None.

Statutory authority:

TWC, Chapter 18; TWC, §§5.013, 5.102, 5.103, 5.120, 5.509, 5.551, 7.302, 11.0237, 11.082, 11.0842, 11.121, 11.1405, 16.053, 26.011, 26.027, 26.0272, 26.0291, 27.021, 27.025, 26.041; and THSC, Chapter 341, Subchapter C, §341.0316.

Effect on the:

A.) Regulated community:

Members of the regulated community who apply for a permit associated with the diversion of marine seawater, conveyance of treated marine seawater in the bed and banks of a watercourse, the diversion of seawater for desalination and use for industrial purposes, treated marine seawater discharges, and wastewater discharges from marine seawater desalination projects will be affected by this adopted rulemaking. The rules will be applied by TCEQ staff during the administrative and technical reviews of water rights applications associated with the diversion of marine seawater, conveyance of treated marine seawater in the bed and banks of a watercourse, and the diversion of seawater for desalination and use for industrial purposes. After an application for a water right is granted, a permittee will be required to meet the terms and special conditions of their permit.

This rulemaking, in accordance with HB 2031 and HB 4097, requires a person who plans to divert and use state water that consists of marine seawater or seawater to determine the TDS concentrations of the seawater at the water source by monthly sampling for a period of one year and analysis. The data collected is to be provided to TCEQ in accordance with HB 2031 and HB 4097. The rulemaking requires reasonable measures to minimize impingement and entrainment for both permitted and exempt facilities and provides that marine seawater and seawater may be diverted for any beneficial purpose (if the seawater is treated before it is used). The rulemaking will require the applicant to consult with TPWD and the GLO in accordance with HB 2031 regarding the diversion and discharge points prior to submitting an application.

Additionally, this rulemaking provides an alternative expedited procedure for obtaining a discharge permit for a marine seawater desalination plant. The rules will be applied by TCEQ staff during the administrative and technical reviews and public notice process for wastewater discharge applications from marine seawater desalination plants. These types of discharges may, alternatively, be authorized under TWC, Chapter 26 and 30 TAC Chapter 305.

In accordance with TWC, §18.005(e), the rulemaking requires the application process for treated marine seawater discharges to include public notice, public comment, an opportunity for a public meeting, and an opportunity for a contested case hearing.

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However, the application process for off-shore discharges only includes public notice and comment.

Near-shore discharge applications are subject to TPDES requirements and must be processed in accordance with the existing permitting procedures. The executive director will make every reasonable effort to expedite the review of these applications.

B.) Public:

The adopted rules are required by HB 2031 and HB 4097 to provide expedited permitting processes associated with marine seawater desalination, including diversions and discharges. In HB 2031, the legislature states that marine seawater is a potential new source of water for drinking and other beneficial uses. Furthermore, the legislature stated the purpose of HB 2031 is to streamline the regulatory process for and reduce the time required for and cost of marine seawater desalination.

C.) Agency programs:

The adopted rulemaking will have little impact on agency programs. The Water Availability Division will implement the rules when processing applications associated with the diversion of marine seawater, conveyance of treated marine seawater in the bed and banks of a watercourse, and the diversion of seawater for desalination and use for industrial purposes. If an applicant applies under these rules, program staff will expedite these types of applications.

The Water Quality Division will implement the rules when processing applications associated with treated marine seawater discharges and off-shore discharges when applicants choose to apply for a permit under the rules adopted by this rulemaking. Applicants still retain the option to apply for a discharge permit under TWC, Chapter 26, and 30 TAC Chapter 305. If an applicant chooses to apply under new Chapter 318, program staff will expedite reviews of these types of applications.

Stakeholder meetings:

A stakeholder meeting was held on October 8, 2015, in Austin, Texas. TCEQ staff presented general information about the proposed rulemaking and solicited stakeholder comments regarding the implementation of HB 2031 and HB 4097. The meeting was attended by 26 stakeholders representing a broad spectrum of interests affected by this rulemaking and across the state. The comment period related to this stakeholder meeting remained open until October 23, 2015, and the commission received comment letters from the Guadalupe-Blanco River Authority, the National Wildlife Federation (NWF), the Sierra Club Lone Star Chapter (Sierra Club), and TPWD. The executive director based these rules on consideration of the comments received from the stakeholders, sound science, and other public interest and relevant factors.

Public comment:

The commission held a public hearing on June 21, 2016, in Austin. The comment period closed on July 5, 2016. The commission received comments from AEM the Woodlands; Asociacion Amiga; Clean Water Action; Coastal Conservation Association Texas; EV Houston Newspaper; Glenrose Engineering, Inc.; the Honorable A.R. Senac, Chambers County Commissioner, Precinct 4; San Marcos River Foundation; Save Our Springs

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Alliance; Texas Conservation Alliance; Texas Desalination Association's Marine Subcommittee; TPWD; Viva! The Woodlands Magazine; joint comments submitted by the Galveston Bay Foundation, NWF, and Sierra Club; 41 individuals who submitted personalized comments through NWF; 940 individuals who submitted identical comments through NWF; 32 individuals who submitted personalized comments through the Sierra Club; and 1,299 individuals who submitted identical comments through the Sierra Club. The majority of the commenters requested that the rules include additional requirements and a more expansive review by the commission.

Comments on Chapter 39 related to increasing the public comment period, expanding the public notice to include additional individuals and entities, and adding additional information to the public notice text.

Comments on Chapter 295 related to clarifying the distinction between marine seawater under TWC, Chapter 18 and seawater under TWC, §11.1405, clarifying how exempt facilities would be treated, impingement and entrainment, determination of TDS concentration, and expanding the public notice requirements.

Comments on Chapter 297 related to clarifying the distinction between marine seawater under TWC, Chapter 18 and seawater under TWC, §11.1405, consideration of the adopted environmental flow standards in Chapter 298, and the commission's authority to deny applications.

Comments on Chapter 318 related to clarifying that the commission has authority to deny permit applications, clarifying the three-mile line that differentiates near-shore and off-shore discharges, deleting the statement in rule that treated marine seawater are not pollutant discharges, adding a requirement that treated marine seawater discharges meet water quality standards, expanding the application requirement to include the results of consultation with TPWD and GLO, adding additional information to the technical summary text, and requiring the commission to grant a public meeting request from county judges.

Significant changes from proposal:

Chapter 39 was revised to increase the public comment period from 10 calendar days to 15 calendar days, add county judges and individuals on the interested persons list to the list of individuals that are emailed the public notice, and add the quantity of wastewater proposed to be discharged to the public notice text.

Chapter 295 was revised to clarify the distinction between marine seawater under TWC, Chapter 18 and seawater under TWC, §11.1405, to provide more specific information on what would need to be provided to demonstrate that a facility is exempt from water rights permitting requirements and to require these facilities to submit information on reasonable measures to minimize impingement and entrainment, and to provide cross-references to specific technical requirements in new Chapter 297, Subchapter K. Chapter 295 was also revised to allow a person to submit written comments for applications to divert seawater and marine seawater and to convey treated marine seawater in the bed and banks of a watercourse.

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Chapter 297 was revised to clarify the distinction between marine seawater under TWC, Chapter 18 and seawater under TWC, §11.1405 and to provide more specific requirements for determination of TDS concentration and impingement and entrainment. Chapter 297 was also revised to clarify the requirements for exempt facilities related to impingement and entrainment.

Chapter 318 was revised to clarify the three-mile boundary that differentiates near-shore and off-shore discharges, add a requirement that treated marine seawater discharges meet water quality standards, expand the application requirement to include the results of consultation with TPWD and GLO, and to add the quality of wastewater proposed to be discharged to the technical summary text. Changes were not made to Chapter 318 relating to the commission authority to deny permit applications because the rule already includes this authority. The statement that treated marine seawater are not pollutant discharges was not removed but the definition of treated marine seawater was revised to require treatment to meet water quality standards and to protect water quality. The rule allows anyone to request a public meeting, however the requirement for when a public meeting is granted is found in 30 TAC §55.154, which is cross-referenced in Chapter 318. This requested change would result in more public meetings conducted under this rule than would be required under existing rule, thereby increasing instead of decreasing the length of the permitting process.

Potential controversial concerns and legislative interest:

There is legislative interest regarding the implementation of HB 2031 and HB 4097.

Does this rulemaking affect any current policies or require development of new policies?

No.

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

TWC, §§11.1405, 18.003, and 18.005, directs the commission to adopt rules providing an expedited procedure for acting on an application associated with the diversion of marine seawater, conveyance of treated marine seawater in the bed and banks of a watercourse, the diversion of seawater for desalination and use for industrial purposes, treated marine seawater discharges, and wastewater discharges from marine seawater desalination plants. This rulemaking complies with the statutes and any alternative course of action would not be in compliance with HB 2031 and HB 4097. These bills did not offer alternative regulatory methods of expediting a permit for a desalination facility.

Key points in the proposal rulemaking schedule:

***Texas Register* proposal publication date:** May 27, 2016

Anticipated *Texas Register* adoption publication date: ~~December 2~~ November 4, 2016

Anticipated effective date: ~~December 8~~ November 10, 2016

Six-month *Texas Register* filing deadline: November 28, 2016

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Attachments

HB 2031

HB 4097

cc: Chief Clerk, 2 copies
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Kathy Ramirez
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